HARTMANN
ACCESS CONTROL SYSTEMS

TROVE™
Access & Power Integration

T1RHC3

Fully assembled kit includes:

- Trove1R rack enclosure with Altronix and Hartmann backplane (THC1R)
- (1) AL600ULXB - Power Supply/Charger

All components of this Trove kit are UL Listed sub-assemblies.
Please refer to the included corresponding
Sub-Assembly Installation Guides for further information.

Installation Guide

All registered trademarks are property of their respective owners.

CE

Rev. T1RHC3-033022

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix T1RHC3 rack kit is pre-assembled and consist of Trove1HC1R enclosure/backplane with factory installed Altronix power supply/charger. These kits also accommodate various combinations of Hartmann boards for up to eight (8) doors in a single enclosure.

Configuration Chart:

Altronix Model Number	115VAC 60Hz Input (current draw)	Power Supply Board Input Fuse Rating	Maximum Battery Charge Current	12VDC Total Output Current	24VDC Total Output Current
T1RHC3	3.5A	5A/250V	0.7A	6A	6A

Hardware and Accessories:

⬡� Spacer | 🔩 5/16" Pan Head Screw | ⬡ Lock Nut

Specifications:

Agency Listings:
• CE European Conformity.

Mechanical:
• Black enclosure with ample knockouts for convenient access.
• Includes: tamper switch, cam lock and mounting hardware.
• Modular 2U standard EIA 19" drawer with extendable slides up to 48".
• Dimensions (H x W x D): 3.375" x 19.0" x 26.5" (85.8mm x 482.6mm x 673.1mm)

Included Accessories:
• One (1) tamper switch (Altronix Model TS112 or equivalent).
• Cam lock.

Available Accessories (not included)**:**
• RE2: Rack Mount Battery Enclosure accommodates up to four (4) 12VDC/7AH batteries.
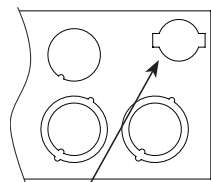• WM5, WM25, WM100: Magnetic Cable Tie Mounts (5, 25, 100 counts).

Installation Instructions for T1RHC3:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. These products are for indoor use only and must be installed within the protected premises.
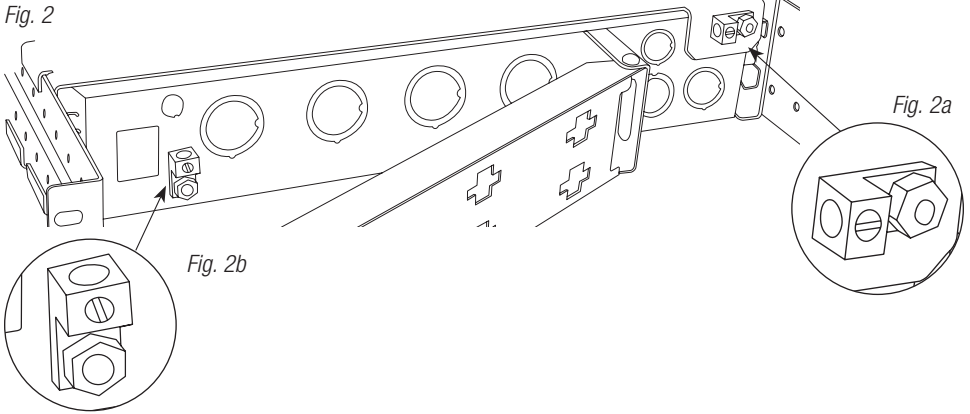
Note: First assemble and Install Z Bracket Wire Management Accesory *(refer to Z Bracket Installation pg. 4)*

1. Remove backplane from enclosure prior to installing into rack cabinet (do not discard hardware).
2. In order to mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) turn the enclosure upside down. Punch out the knockout in designated location, on the back of the unit, from outside of the drawer *(Fig. 1, pg. 3)*. Insert the tamper switch into the knockout from outside of the drawer with the button facing outwards and spaded connectors inside the drawer. Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device.
   To activate alarm signal open the rack drawer.
3. Slide the rack enclosure into an open 2U location in the four post rack cabinet.
4. Utilizing proper fasteners attach front ears to the rack rails.
5. Attach the rear of the adjustable slides to the rear rails of the rack cabinet with the proper fasteners.
6. Secure the rack cover *(Fig. 2a, pg. 3)* and rack drawer to earth ground *(Fig. 2b, pg. 3)*.
7. Make sure that all internal cofigurations (wiring, voltage selection, switch settings, etc.) are complete before mounting backplane back into enclosure.
8. Refer to the *ULXB Power Supply/Charger Installation Guide* AL600ULXB for further instructions.

Fig. 1
Back of the drawer, viewed from outside.

Tamper Switch mounting location

Fig. 2

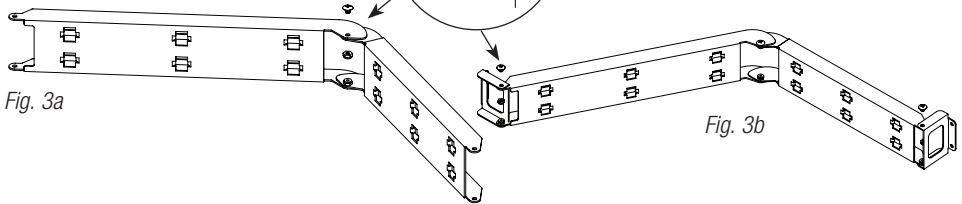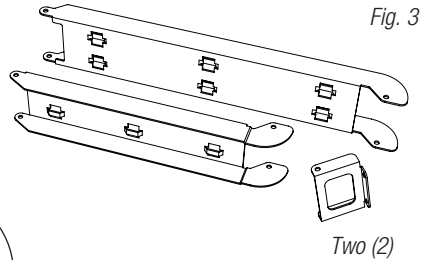*Fig. 2a*

Fig. 2b

Assembling and Attaching
Z Bracket Wire Management Accessory (included):

Altronix Trove Rack enclosures include Z Bracket, a convenient and reliable wire management accessory.
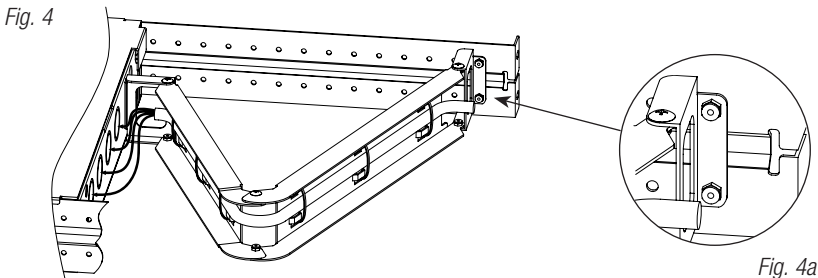
Hardware (included):

Ten (10) bolts and   eight (8) lock nuts.

Fig. 3

1. Carefully unpack Z Bracket. Do not discard hardware (included) *(Fig. 3, pg. 4)*.
2. Attach arms to each other using bolts and lock nuts *(Fig. 3a, pg. 4)*.
3. Attach the hinge brackets to the ends of arms using bolts and nuts positioning them as shown on *(Fig. 3b, pg. 4)*.
4. Make sure that all nuts are tightened.

Two (2)

Fig. 3a

Fig. 3b

5. Attach the hinge bracket on the longer side of Z Bracket to the adjustable slide using bolts and lock nuts (included) *(Fig. 4, 4a, pg. 4)*.
6. Attach the hinge bracket on the shorter side of Z Bracket to the rear of the rack enclosure using bolts (included).

Fig. 4

Fig. 4a

T1RHC3: Configuration of Hartmann Boards:

1. Align the Hartmann Controls boards on the backplane to match the boards' mounting holes with corresponding pems.
2. Fasten spacers (provided) to pems that match the hole pattern for Hartmann Control boards *(Fig. 2, 2a, pg. 3)*.
   Note: Hartmann Controls boards must be properly grounded.
   Please use provided metal spacers for the lower right mounting holes *(Fig. 5, pg. 3)*.
3. Mount Hartmann Controls boards to spacers utilizing provided 5/16" pan head screws *(Fig. 2a, pg. 3)*.
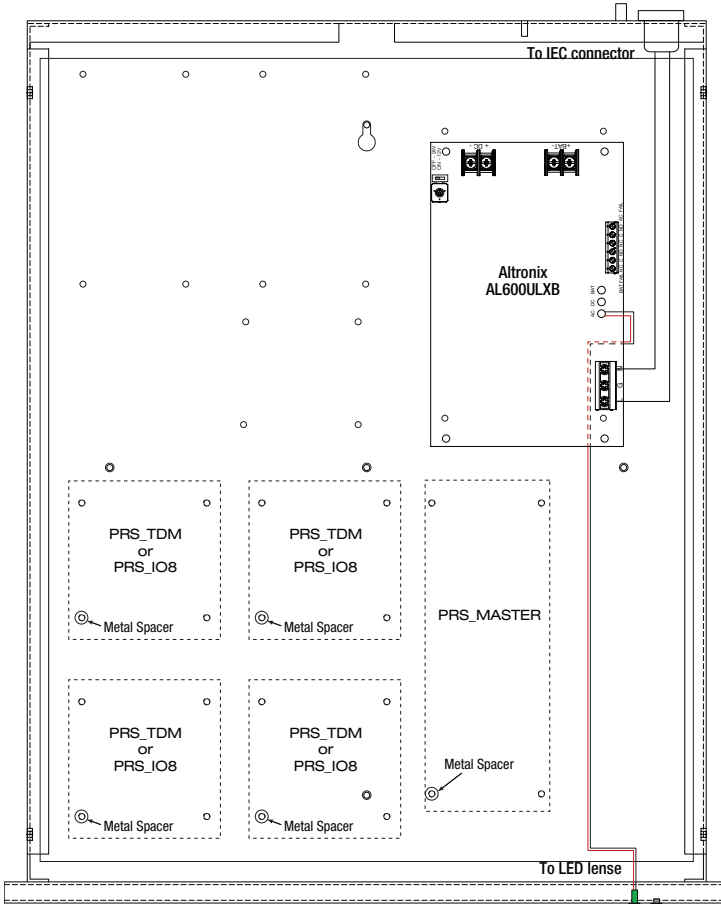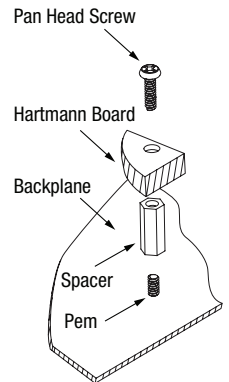4. Fasten backplane to Trove1 enclosure utilizing lock nuts (provided).
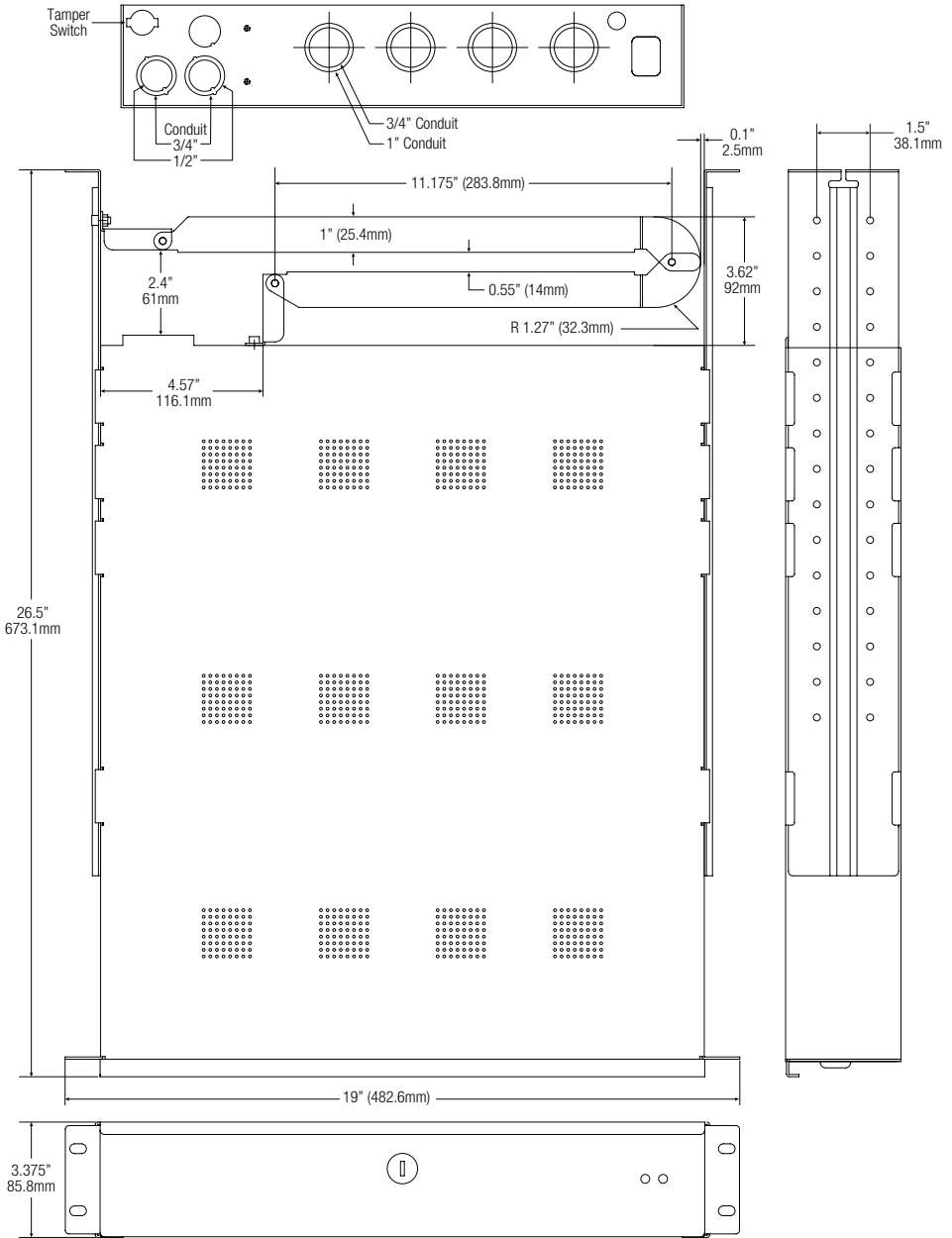
Fig. 5

Fig. 5a

Notes:

Notes:

Notes:

Trove1R Enclosure Dimensions:

3.375" x 19.0" x 26.5" (85.8mm x 482.6mm x 673.1mm). Shown with Z Bracket attached.

Tamper Switch

Conduit
3/4"
1/2"

3/4" Conduit
1" Conduit

0.1"
2.5mm

1.5"
38.1mm

11.175" (283.8mm)

1" (25.4mm)

2.4"
61mm

0.55" (14mm)

3.62"
92mm

R 1.27" (32.3mm)

4.57"
116.1mm

26.5"
673.1mm

19" (482.6mm)

3.375"
85.8mm

MEMBER

T1RHC3 Installation Guide